

3.0008 Casual and Pitfall Trap Collections of Ground Beetles from Three Locations in the Ottawa District¹, Ontario

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During 1969, about 6,900 specimens of ground beetles were collected from pitfall traps at two sites in eastern Ontario, the Central Experimental Farm, Ottawa, and Richmond. Specimens were taken weekly from mid-July to mid-October from cultivated, unsprayed plots of cabbage used for studies by D. G. Harcourt on the population dynamics of the imported cabbageworm, *Pieris rapae* (L.). Other abundant prey were the diamondback moth, *Plutella maculipennis* (Curt.), and the cabbage maggot, *Hylemya brassicae* (Bouché). The texture of the soil in the plots ranged from loam to sandy loam.

Previously, the author had made a casual collection from an old meadow at Beechgrove, near Quyon in western Quebec. During 1966 and 1967, about 300 specimens were collected at random from pitfall traps and by digging in the surface layer of soil and sod. The site, in an area of sandy loam, was characterized by a patchy distribution of vegetation, varying from sparse to abundant. The principal flora were: timothy, *Phleum pratense* L.; black-eyed susan, *Rudbeckia serotina* Nutt.; goosefoot, *Chenopodium* sp., ox-eye daisy, *Chrysanthemum leucanthemum* L.; and goldenrod, *Solidago* sp. In addition, there were a number of tree and shrub seedlings.

Table 1 lists the 37 species of carabids collected at the three locations, with a record of their abundance. This gives an interesting comparison of species found in a permanent meadow and those found under row crop production. Except for *Harpalus pennsylvanicus* De. G., which was common everywhere, the complex of species at Beechgrove was quite different from that at Ottawa and Richmond.

Representative specimens are contained in the Canadian National Collection. Mr. R. de Ruelle of this Institute confirmed or identified most of the species. Mr. Henri Goulet, now at the University of Alberta, Edmonton, identified many of the specimens from Beechgrove. Dr. George Ball of the latter institution identified the specimens of *Harpalus opacipennis* Hald.

LITERATURE CITED

- HICKS, S. D. 1965. The northern limits of several species of Coleoptera with special reference to their occurrence in the Ottawa District. *Coleopt. Bull.* 19: 37-42.
DESCRIPTORS: Coleoptera; Carabidae; collecting data; Ottawa, Ontario, Canada.

¹The area embraced by a circle of thirty-mile radius centered at the Parliament Buildings, Ottawa (See Hicks, 1965).

TABLE I

Carabids collected from three locations in the Ottawa District

Species	Beechgrove	Ottawa	Richmond
* <i>Pterostichus melanarius</i> Ill.	0	very abundant	very abundant
<i>Pterostichus lucublandus</i> Say	0	2	13
<i>Pterostichus chalcites</i> Say	0	2	1
<i>Harpalus pennsylvanicus</i> DeG.	common	common	common
* <i>Harpalus affinis</i> Schrk.	1	common	common
<i>Harpalus erraticus</i> Say	common	3	8
<i>Harpalus faunus</i> Say	1	1	15
<i>Harpalus funerarius</i> Csiki	0	4	6
<i>Harpalus pleuriticus</i> Kby.	1	0	0
<i>Harpalus herbivagus</i> Say	4	1	5
<i>Harpalus longicollis</i> Lec.	0	0	2
<i>Harpalus indigenus</i> Csy.	1	1	3
<i>Harpalus opacipennis</i> Hald.	common	1	1
<i>Harpalellus basilaris</i> Kby.	0	0	1
<i>Amara obesa</i> Say	common	0	1
* <i>Amara apricaria</i> Payk.	0	1	2
<i>Amara avida</i> Say	0	2	9
<i>Amara carinata</i> Lec.	0	9	5
* <i>Amara aenea</i> DeG.	1	1	1
<i>Amara rubrica</i> Hald.	common	0	0
<i>Amara musculus</i> Say	3	0	0
* <i>Amara familiaris</i> Duft.	2	0	0
<i>Amara cupreolata</i> Putz.	2	0	0
<i>Agonum placidum</i> Say	0	common	common
<i>Agonum cupripenne</i> Say	0	0	1
<i>Stenolophus comma</i> Fab.	0	common	common
<i>Chlaenius tomentosus</i> Say	common	0	1
<i>Chlaenius sericeus</i> Forst.	0	0	1
<i>Dyschirius globulosus</i> Say	1	0	0
<i>Calosoma calidum</i> Fab.	5	0	0
<i>Anisodactylus rusticus</i> Say	common	0	0
<i>Anisodactylus sanctaecrucis</i> Fab.	0	6	common
<i>Anisodactylus nigrita</i> Dej.	0	0	1
<i>Calathus gregarius</i> Say.	2	0	0
<i>Calathus opaculus</i> Lec.	4	0	0
<i>Cymindis pilosa</i> Say	common	0	0
<i>Trichocellus cognatus</i> Gyll.	0	0	1
*European introductions			